



## Disaster and Emergency Management Resources

# Introduction to Major Hazardous Materials Accidents

### Definitions

Hazardous materials are chemical substances, which if released or misused can pose a threat to the environment or health. These chemicals are used in industry, agriculture, medicine, research, and consumer goods. Hazardous materials come in the form of explosives, flammable and combustible substances, poisons, and radioactive materials. These substances are most often released as a result of transportation accidents or because of chemical accidents in plants. As many as 500,000 products pose physical or health hazards and can be defined as "hazardous chemicals."

### Hazardous Materials Accident Facts

- A hazardous materials accident can occur anywhere. Communities located near chemical manufacturing plants are particularly at risk. However, hazardous materials are transported on our roadways, railways, and waterways daily, so any area is considered vulnerable to an accident.
- Hazardous materials in various forms can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Many products containing hazardous chemicals are used and stored in homes routinely.
- Varying quantities of hazardous materials are manufactured, used, or stored at an estimated 4.5 million facilities in the United States ranging from major industrial plants to local dry cleaning establishments or gardening supply stores.
- The Emergency Planning and Community Right-to-Know Act requires that detailed information about hazardous substances in or near communities be available at the public's request.
- You may be exposed to a chemical even though you may not be able to see or smell anything unusual. You may be exposed in three ways: (1) breathing the chemical; (2) swallowing contaminated food, water, or medication; or (3) touching the chemical, or coming into contact with clothing or things that have touched the chemical.

*Adapted from resource material developed by the Federal Emergency Management Agency*